detecting the instant of commutation by comparing a voltage induced in a stator winding phase in which no current is applied to a reference voltage; and

changing the reference voltage in dependence upon at least one of a predefined setpoint value of a rotational speed of the direct-current motor and a manipulated variable calculated from the predefined setpoint value.

12. (Amended) A method for shifting an instant of commutation for a sensorless and brushless direct-current motor including stator windings fed by a multi-phase converter connection, comprising the steps of:

detecting the instant of commutation by comparing a voltage induced in a stator winding phase in which no current is applied to a reference voltage;

changing the reference voltage in dependence upon at least one of a setpoint value of a rotational speed of the direct-current motor and a manipulated variable calculated from the setpoint value; and

shifting the instant of commutation such that the reference voltage is raised in a shape of a parabola.

16. (Amended) A system for shifting an instant of commutation, comprising:

a multi-stage converter connection, including:

an output stage control,

a commutation logic,

a phase selector, and

a phase discriminator;

a sensorless and brushless direct-current motor fed by the multi-stage converter connection;

a commutation detection element, including:

a first input supplied by the phase selector with an instantaneous value of a voltage induced in a non-energized phase, and

a second input supplied with a reference voltage for comparison;

a commutation shift element for changing the reference voltage in accordance with a specific curve; and

a manipulated-variable calculation element for supplying a manipulated variable

b3

to the commutation shift element as a function of a predefined setpoint speed of the direct-current motor.

17. (Amended) A system for shifting an instant of commutation, comprising:

a multi-stage converter connection, including:

an output stage control,

a commutation logic,

a phase selector, and

a phase discriminator;

a sensorless and brushless direct-current motor fed by the multi-stage converter connection;

a commutation detection element, including:

a first input supplied by the phase selector with an instantaneous value of a voltage induced in a non-energized phase, and

a second input supplied with a reference voltage for comparison;

a commutation shift element for changing the reference voltage in accordance with a specific curve, wherein in the commutation shift element, the reference voltage is changed in accordance with a parabola; and

a manipulated-variable calculation element for supplying a manipulated variable to the commutation shift element as a function of a setpoint speed of the direct-current motor.

---

21. (Amended) A system for shifting an instant of commutation, comprising:

b4

a multi-stage converter connection, including:

an output stage control,

a commutation logic,

a phase selector, and

a phase discriminator;

a sensorless and brushless direct-current motor fed by the multi-stage converter connection;

a commutation detection element, including:

a first input supplied by the phase selector with an instantaneous value of a voltage